## **PATENT COOPERATION TREATY**

## **PCT**

REC.D	47	٠,٠	···	PCT
WIPC				POI

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file refe	FOR FURTHER A	CTION S	ee Form PCT/IPEA/416			
International application No. International filing data PCT/EP2004/053149 29.11.2004		(day/month/year)	Priority date (day/month/year) 12.12.2003			
International Patent Classification (IPC) or national classification and IPC H04M1/725						
Applicant SONY ERICSSON MO	BILE COMMUNICATIONS AB et	al.				
This report is the int Authority under Artic	<ol> <li>This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</li> </ol>					
2. This REPORT cons	ists of a total of 6 sheets, including t	nis cover sheet.				
3. This report is also a	ccompanied by ANNEXES, comprisi	ng:				
a. 🛭 sent to the a	pplicant and to the International Bure	au) a total of 6 sheets, a	s follows:			
and/or sl	sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).					
beyond t	sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.					
sequence lis						
4. This report contains	indications relating to the following it	ems:				
☐ Box No. 1 B	asis of the opinion					
l <u> </u>	riority					
☐ Box No. III N	on-establishment of opinion with rega	rd to novelty, inventive st	ep and industrial applicability			
☐ Box No. IV La	ack of unity of invention					
	ertain documents cited					
Box No. VII C	☒ Box No. VII Certain defects in the international application					
☐ Box No. VIII C	Box No. VIII Certain observations on the international application					
Date of submission of the de	mand	Date of completion of this	report			
		·				
10.10.2005		20.01.2006				
Name and mailing address of the international		Authorized Officer	uchas Princes			
preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2  NL-2280 HV Rijswijk - Pays Bas  Tel. +31 70 340 - 2040 Tx: 31 651 epo nl  Fax: +31 70 340 - 3016		de Biolley, L Telephone No. +31 70 340	The state of the s			

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/EP2004/053149

_	Box No. I	Basis of the report				
1.	With regard filed, unless	d to the <b>language</b> , this report is based on the international application in the language in which it wa s otherwise indicated under this item.				
	☐ This re which	This report is based on translations from the original language into the following language, which is the language of a translation furnished for the purposes of:				
	☐ pub	ernational search (under Rules 12.3 and 23.1(b)) Dication of the international application (under Rule 12.4) ernational preliminary examination (under Rules 55.2 and/or 55.3)				
2.	With regard to the <b>elements*</b> of the international application, this report is based on <i>(replacement sheets)</i> have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in t report as "originally filed" and are not annexed to this report):					
	Description	, Pages				
	1-18	as originally filed				
	Claims, Nur	mbers				
	1-36	received on 10.10.2005 with letter of 05.10.2005				
	Drawings, S	Sheets				
	1/7-7/7	as originally filed				
	□ a sequ	ence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing				
3.						
	⊔ the □ the	description, pages claims, Nos.				
		drawings, sheets/figs sequence listing (specify):				
		table(s) related to sequence listing (specify):				
4.	This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).					
		description, pages claims, Nos.				
	☐ the	drawings, sheets/figs				
		sequence listing <i>(specify)</i> : table(s) related to sequence listing <i>(specify)</i> :				
	* Tf i+4	em 4 applies some or all of these sheets may be marked "supercoded "				

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/EP2004/053149

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Yes: Claims No: Claims 1-33 34-36

Inventive step (IS)

Yes: Claims

1-33 34-36

. . .

No: Claims

3

Industrial applicability (IA)

Yes: Claims

1-36

No: Claims

2. Citations and explanations (Rule 70.7):

see separate sheet

#### Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

#### Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

#### Re Item V.

1 Reference is made to the following documents:

D1: US-A-5 301 360 (GOLDBERG ARTHUR M) 5 April 1994 (1994-04-05)

D2: US-A-5 859 522 (THEOBALD DAVID J) 12 January 1999 (1999-01-12)

- 2 Independent claim 1
- 2.1 The document D1 is regarded as being the closest prior art to the subject-matter of claim 1, and shows (see D1, col. 1, line 56 to col. 2, line 20 and col.3, line 56 to col. 4, line 9):

  Method for identifying a communication interface of an electronic unit attached to a connector on an electronic device, comprising the steps of:
  - generating a voltage pulse in said device on a pin of said connector
  - measuring the resulting voltage on another pin of said connector
  - comparing the measured voltage with predetermined voltage criteria
  - performing communication interface identification of said unit dependent on said comparison

The subject-matter of claim 1 differs from this known method in that the voltage measurement is performed on the same pin of the connector.

The subject-matter of claim 1 is therefore new (Article 33(2) PCT).

2.2 The problem to be solved by the present invention may be regarded as how to perform identification of a communication interface on fewer pins of a system connector and consequently being able to use the same pins for different communication interfaces.

The solution to this problem proposed in claim 1 of the present application is considered as involving an inventive step (Article 33(3) PCT) for the following reasons:

No prior art document suggests or hints at the feature of identifying an accessory unit attached to a connector of an electronic device by generating a voltage pulse in the electronic device on a pin of the connector, measuring the voltage on the same pin and identifying the accessory unit by comparing the measured voltage with a predetermined criteria.

#### 3 Independent claims 24 and 25

The same reasoning applies, mutatis mutandis, to the subject-matter of the corresponding independent claims 24 and 25, which therefore are also considered new and inventive.

- 4 Claims 2-23 and 26-33 are dependent on claim 1 or 25 and as such also meet the requirements of the PCT with respect to novelty and inventive step.
- 5 Independent claim 34

Claim 34 relates to an electronic circuit comprising an electric load devised to generate a dynamic voltage response on a pin when subjected to a voltage pulse on said pin. Any resonant circuit (eg. RC or RLC circuit) anticipates this claim. The subject-matter of said claim is therefore not new Article 33(2) PCT.

6 Dependent claims 35 and 36

Dependent claims 35 and 36 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty or inventive step because the features of said claims appear to be design measures normally expected bo the person skilled in the art.

#### Re Item VII.

- 1 Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the documents D1 and D2 is not mentioned in the description, nor are these documents identified therein.
- 2 Independent claim 1 is not in the two-part form in accordance with Rule 6.3(b) PCT.
- The features of the claims are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (SEPARATE SHEET)

International application No.

PCT/EP2004/053149

#### Re Item VIII.

The features "wherein said identity is dependent on ... / is determined by ..." in the apparatus claims 27 and 29 relate to a method of using the apparatus rather than clearly defining the apparatus in terms of its technical features. The intended limitations are therefore not clear from this claim, contrary to the requirements of Article 6 PCT.